



Alpha Magnetic
Spectrometer NASA / DOE

Open Paper Management Tool Open Items Report



National Aeronautics and
Space Administration

Friday, January 11, 2008

Open Action Items Report

Open Item Number: 05-042

RID Open Date: 9/14/2005

Title: Helium Venting Hazard Analysis

Initiator(s):

Description: Provide hazard analysis for venting of helium from the main tank.

Action Item Information

Actionee(s): Chris Tutt/ESCG

Action Due Date: 4/1/2007

Action: Take existing hazard analysis of helium venting presented to NASA and create stand-alone report for delivery to ESTEC.

Action Status: 1/11/2008 - Information received from SM - more detailed studies in work.
12/16/2007 - Draft writeup under review by KSC safety. Art Nelson to pulse Tom Tinsler on status.
11/20/2007 - Review of analysis identified error in SSPF calculation which significantly reduces potential hazards. Detailed analysis being prepared for submission to KSC and ESTC.
8/24/2007 - Venting analysis confirms that directed vents will be needed for SSPF - analysis for ESTEC will be done next.
8/9/2007 - Collaboration between SM and ESCG more clearly defined in telecon - answers should be available soon to support GOWG and ESTEC.
11/20/06 - Date rolled to April 1st to better reflect need. Meeting at ESTEC planned for late April.
8/14/06 - Date rolled to September 1st.
6/5/06 - Necessary information received from SCL. In-work, C. Tutt.
3/30/2006 - Date changed again as analyst is not becoming any faster.
3/6/2006 - Date changed to 4/1 to account for slothful analyst.
11/14/2006 - Date changed to 3/1 to better reflect analyst workloads.

Open Action Items Report

Open Item Number: 05-043

RID Open Date: 9/14/2005

Title: Helium Venting Hazard Analysis

Intiator(s):

Description: Provide hazard analysis for venting of helium from the main tank.

Action Item Information

Actionee(s): Gaetan Piret/ESTEC

Action Due Date: 5/1/2007

Action: Upon delivery of hazard analysis described in 05-042, evaluate potential hazards to EMI and TV test chambers.

Action Status: 11/20/06 - Date rolled to May 1st to roll with 05-042.

8/14/06 - Date rolled to October 1st.

4/10/06 - Due date changed to 6/1/06 allow time after completion of 05-042.

11/12/2005 - Date changed to 4/1/2006 to match item 05-042.

Open Action Items Report

Open Item Number: 05-074

RID Open Date: 10/28/2005

Title: CGSE Support at Pad

Intiator(s): Trent Martin

Description: *It is not clear how the cryogenic GSE, particularly the piping, will be supported at the pad.*

Action Item Information

Actionee(s): Robert Becker/MIT, Alexander Gretchko/MIT

Action Due Date: 10/25/2007

Action: *Provide details on how the GSE will be supported at the pad.*

Action Status: 12/16/2007 - Pump layout comments received from Pete Reutt. New proposals under work in Shanghai to accommodate suggestions.

10/24/2007 - New layouts proposed at GOWG - New drawings/layouts in work in Shanghai.

6/4/2007 - Ken Bollweg and Mike Capell to work with Alexander Grechko to resolve file transfer problems.

11/27/06 - J. Keiffenheim reports that space is available for hanging plumbing, and KSC can design, manufacture hanging hardware. Still have concerns regarding fill port plumbing suspension, so will keep open.

10/16/06 - Date rolled to 11/15 after Cryo GSE meeting at KSC.

6/26/2006 - Date rolled to October 15th after Magnet Processing meeting at KSC.

5/15/2006 - Further discussion on handling of CGSE after PLBD close prelaunch is required.

3/24/2006 - Trent Martin to forward all data provided by KSC to Art Nelson for inclusion in ground safety package.

2/14/2006 - Alexander Gretchko waiting on information from KSC - Trent Martin to coordinate.

Open Action Items Report

Open Item Number: 07-005

RID Open Date: 6/14/2007

Title: DDRS Thermal Analysis

Initiator(s): Chris Tutt

Description: DDRS must be shown to meet touch temperature requirements in Form 1230 Row 10.

Action Item Information

Actionee(s): Tim Urban/ESCG, Craig Clark/ESCG

Action Due Date: 9/10/2007

Action: Perform sufficient analysis or review to demonstrate that PGSC/NGLS will not see excessive thermal load.

Action Status: 10/12/2007 - System information provided to Craig Clark, analysis underway.

6/15/2007 - Tim Urban, Craig Clark, and Leland Hill to determine what assessment is required to close SVM and provide ECD.

Open Action Items Report

Open Item Number: 07-008

RID Open Date: 6/14/2007

Title: *DDRS Rapid Safing*

Intiator(s): *Chris Tutt*

Description: *DDRS must meet rapid safing requirements described in MA2-96-190.*

Action Item Information

Actionee(s): *Tim Urban/ESCG*

Action Due Date: 9/10/2007

Action: *Gain concurrence from NASA that DDRS meets rapid safing requirements.*

Action Status: 11/30/2007 - Question refered to Frank Moreno/MO to check with Shuttle safety.
9/28/2007 - Joel Sills/MO researching requirements and trying to identify appropriate points of contact within SSP.
6/15/2007 - Tim Urban to investigate who approves IVA rapid safing and find out what they want to see to close issue.

Open Action Items Report

Open Item Number: 07-016

RID Open Date: 7/31/2007

Title: Static Test Approval

Initiator(s): Chris Tutt

Description: SWG is withholding approval of the AMS-02 Static Test

Action Item Information

Actionee(s): Chris Tutt/ESCG, Carl Lauritzen/ESCG

Action Due Date: 9/1/2007

Action: Meet with SWG to review memo describing static test design principles and determine what additional information, if any, is needed for their approval.

Action Status: 9/27/2007 - Paul Romine has asked to see initial test correlation results before issuing final opinion. Quick correlation in work and will be written up as stand-alone memo.
8/17/2007 - Meeting held on 8/15/2007. Basic static test design concept accepted by SWG, but Paul Romine to review detailed writeup and issue final approval.
8/9/2007 - Chris Tutt to pulse Lance Mushung and Paul Romine for status.

Open Action Items Report

Open Item Number: 07-020

RID Open Date: 11/5/2007

Title: Ground Vacuum Pumps

Intiator(s): Jack Keifenheim

Description: Provide suitable controls to prevent ground pump from contaminating KSC facilities.

Action Item Information

Actionee(s): Chris Tutt/ESCG, Trent Martin/JSC

Action Due Date:

Action: Determine suitable trailer/shed/containment system for ground pump outside of SSPF.

Action Status:

Open Action Items Report

Open Item Number: 07-025

RID Open Date: 11/5/2007

Title: Vacuum Pump Monitoring

Intiator(s): Jack Keifenheim

Description: Determine ground and on-board vacuum pump monitoring requirements at pad.

Action Item Information

Actionee(s): Trent Martin/JSC, Mike Capell/MIT

Action Due Date: 6/15/2008

Action: Determine what information needs to be monitored on the vacuum pumps during all ground processing scenarios. In particular, determine what monitoring is required during S0024 and the pad clears, and whether 24/7 monitoring is required.

Action Status: 12/16/2007 - Issues to be investigate during CGSE shakedown at CERN. Action date rolled to delivery + 3 weeks (~mid-June).

Open Action Items Report

Open Item Number: 07-027

RID Open Date:

Title: Emergency Vent Lines

Initiator(s): Jack Keifenheim

Description: Provide final decision on need for emergency vent lines in SSPF, CRF, Canister, and/or PCR.

Action Item Information

Actionee(s): Art Nelson/ESCG

Action Due Date:

Action: Provide initial hazard report and ground safety writeup on potential credible venting scenarios during KSC operations to GSRP for review.

Action Status: 12/16/2007 - Draft writeup under review by KSC safety.
11/9/2007 - Draft writeup under review by ESCG.

Open Action Items Report

Open Item Number: 07-028

RID Open Date: 11/5/2007

Title: Hurricane Scenario

Intiator(s): Jack Keifenheim

Description: Develop hurricane ride-out scenario for AMS-02.

Action Item Information

Actionee(s): Trent Martin/JSC

Action Due Date:

Action: Provide preliminary plan for keeping AMS-02 safe and functional during a potential hurricane.

Action Status:

Open Action Items Report

Open Item Number: 07-031

RID Open Date: 11/5/2007

Title: Cryo Launch Delay Capability

Initiator(s): Jack Keifenheim

Description: Assess what infrastructure and procedures are required to support potential launch delays of up to 120 hours.

Action Item Information

Actionee(s): Stephen Harrison/SM, Chris Tutt/ESCG

Action Due Date:

Action: Assess the potential states and launch readiness of the cryosystem up to 120 hours after first T-0.

Action Status:

Open Action Items Report

Open Item Number: 07-033

RID Open Date: 11/5/2007

Title: OPF Testing

Intiator(s): Jack Keifenheim

Description: Provide details on proposed OPF testing.

Action Item Information

Actionee(s): Tim Urban/ESCG

Action Due Date: 1/15/2008

Action: Provide details on facility requirements for all proposed OPF tests.

Action Status: 12/16/2007 - Date set to 15 Jan.

Open Action Items Report

Open Item Number: 07-036

RID Open Date: 1/11/2008

Title: Cryosystem Response to Power Flickers

Initiator(s): Chris Tutt

Description: Effects of possible power losses at KSC need to be considered in the cryosystem safety analyses.

Action Item Information

Actionee(s): Tim Urban/ESCG

Action Due Date: 6/1/2008

Action: Need details on the default state of the AMS-02 and an estimate of how long it would take to return to the standard ground operational condition.

Action Status: 1/11/2008 - Initial review of default state is being rolled into safety analysis. Initial review of time to return to nominal ops indicates this should not be a concern as long as commanding is still available. More detailed review will be done with appropriate collaboration personnel at a later date.

Open Action Items Report

Open Item Number: AMS_02-PDS_CDR-06

RID Open Date: 4/18/2005

Title:

Initiator(s): Tim Urban

Description:

Action Item Information

Actionee(s): Marco Molina

Action Due Date: 12/1/2007

Action: Re-evaluate thermal optical properties on the top of the PDS as there are no longer heaters located there (breakdown of MLI vs. white paint). QM & FM different ?

Action Status: 3/26/2007 - Work has restarted - ECD on this question 4/15.
2/5/2007 - ASI budget approved; some movement on contract. Dates rolled to 3/5/07.
8/28/06 - Contract still in work. Work-around by using EM for initial testing. Roll date to 10/5.
7/7/06 - Investigate contract status at July TIM.
5/08/2006 - Contract to be in place by June; roll date to 7/1/06
4/10/06 - On-hold pending resolution of ETH/CGS contract.
8/2/2005 - Awaiting thermal analysis of revised worst hot case.

Open Action Items Report

Open Item Number: AMS_02-PDS_CDR-08

RID Open Date: 4/18/2005

Title:

Initiator(s): Tim Urban

Description:

Action Item Information

Actionee(s): S. Alia

Action Due Date: 12/1/2007

Action: Add 0.03 μ F per 3.2.2.2.2.A of SSP 57003, and add verification by design inspection or test.

Action Status: 3/26/2007 - Updated reports to be released at PDS MRR in December.
2/5/2007 - ASI budget approved; some movement on contract. Dates rolled to 3/5/07.
8/28/06 - Contract still in work. Work-around by using EM for initial testing. Roll date to 10/5.
5/08/2006 - Contract to be in place by June; roll date to 7/1/06
4/10/06 - On-hold pending resolution of ETH/CGS contract.
11/7/2005 - All further PDS activities on hold until 6 Feb 2006.
8/22/2005 - CGS proposes release of updated document by 9/19.
8/15/2005 - Tim Urban to contact Sergio Alia and resolve remaining concerns. Closure expected by 9/5.

Open Action Items Report

Open Item Number: AMS_02-PDS_CDR-09-2

RID Open Date: 4/18/2005

Title:

Initiator(s): Tim Urban

Description:

Action Item Information

Actionee(s): S. Alia

Action Due Date: 12/1/2007

Action: Update document for maximum operating temperature of 51°C (Section 3.2, requirement ID PDS-ENV-3).

Action Status: 2/5/2007 - ASI budget approved; some movement on contract. Dates rolled to 3/5/07.
8/28/06 - Contract still in work. Work-around by using EM for initial testing. Roll date to 10/5.
5/08/2006 - Contract to be in place by June; roll date to 7/1/06
4/10/06 - On-hold pending resolution of ETH/CGS contract.
11/7/2005 - All further PDS activities on hold until 6 Feb 2006.
8/22/2005 - CGS proposes release of updated document by 9/19.
8/2/2005 - MOT should be changed to match updated worst case hot temperature.